

Applicant: T. Allan Hamilton
Serial No.: 09/135,154
Filing Date: August 17, 1998
Docket No.: ZIL-304 (formerly CLB5-B73)

Listing of Claims

Claims 1-50 have been canceled.

51. (currently amended) An IrDA transceiver module ~~having a low-power mode and a full-power mode~~, comprising:

an IrDA receiver that has a low-power state and a full-power state; and
an IrDA discovery signal detection circuit that generates a power-up signal upon detection of a 9600 baud IrDA discovery signal, the power-up signal causing the operation of the IrDA transceiver module receiver to switch from the low-power mode state to the full-power mode state.

52. (currently amended) The IrDA transceiver module of Claim 51, wherein the IrDA transceiver module low-power mode is in a low-power listening mode when the IrDA receiver is in the low-power state , ~~and wherein said switching from the low-power mode to the full-power mode enables the IrDA transceiver module to generate an IrDA transmission.~~

53. (previously presented) The IrDA transceiver module of Claim 51, wherein the IrDA transceiver module includes only one infrared receiver.

54. (currently amended) The IrDA transceiver module of Claim 53, ~~further comprising:~~ wherein the IrDA receiver comprises a comparator, the comparator having a low-power state and a high-power state, the IrDA discovery signal detection circuit causing the comparator to switch from ~~a first~~ the comparator's low-power state to ~~a second~~ the comparator's high-power state upon detection of the 9600 baud IrDA discovery signal.

55. (currently amended) The IrDA transceiver module of Claim 54, wherein the comparator has a power lead, the comparator receiving more power through the

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power lead in the receiver's full-power mode state than in the receiver's low-power mode state.

56. (currently amended) The IrDA transceiver module of Claim 51, wherein the switching from the receiver's low-power mode state to the receiver's full-power mode state enables full IrDA signal transmission and receipt by the IrDA transceiver module.

57. (currently amended) The IrDA transceiver module of Claim 51, wherein the 9600 baud discovery signal is transmitted from an appliance, and wherein the switching from the receiver's low-power mode state to the receiver's full-power mode state enables the IrDA transceiver module to reply to the appliance by transmitting an infrared signal to the appliance.

58. (currently amended) An IrDA transceiver comprising an infrared receiver, an infrared transmitter and an IrDA discovery signal detection circuit, ~~the IrDA transceiver having a low power standby mode and a full power mode~~, wherein detection of a 9600 baud signal by the IrDA discovery signal detection circuit causes the ~~IrDA transceiver~~ infrared receiver to switch from ~~the a receiver low-power standby mode state~~ to the a receiver full-power mode state, said detection of the 9600 baud signal causing the IrDA transceiver to be enabled for full infrared signal receipt.

59. (previously presented) An IrDA transceiver comprising:

infrared transmitter circuitry;

infrared receiver circuitry; and

means for enabling full infrared signal ~~transmission and~~ receipt upon detection of a 9600 baud IrDA discovery signal.

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60. (previously presented) The IrDA transceiver of Claim 59, wherein the means detects the 9600 baud IrDA discovery signal and thereupon increases an amount of power supplied to the infrared receiver circuitry.

61. (New) A method comprising:

- operating an IrDA receiver in a low-power state, wherein the IrDA receiver is part of an IrDA transceiver module;

- detecting an IrDA discovery signal using the IrDA receiver in the low-power state and in response to said detecting generating a signal; and

- in response to said signal causing the IrDA receiver to switch from the low-power state to a high-power state.

62. (New) The method of Claim 61, wherein the IrDA transceiver module consumes an amount of power when the IrDA receiver is in the high-power state, and wherein the IrDA transceiver module consumes approximately one-tenth of said amount of power when the IrDA receiver is in the low-power state.

63. (New) The method of Claim 61, wherein the IrDA receiver comprises:

- a photodiode;

- an amplifier that is powered in the low-power state; and

- comparator circuitry, the comparator circuitry being supplied with more power in the high-power state than in the low-power state.

64. (New) The method of Claim 63, wherein the IrDA transceiver module is not able to transmit an infrared IrDA signal when the IrDA receiver is in the low-power state, and wherein the signal enables the transceiver to transmit an infrared IrDA signal.